

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028512 A1

(51) International Patent Classification⁷: **C07K 16/18**,
A61K 39/395

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(21) International Application Number:
PCT/DK2004/000634

(22) International Filing Date:
17 September 2004 (17.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2003 01369 19 September 2003 (19.09.2003) DK

(71) Applicant (for all designated States except US):
LEUKOTECH A/S [DK/DK]; Fruebjergvej 3, DK-2100
Copenhagen Ø (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DJURUP, René
[DK/DK]; Middelvej 23, DK-2820 Gentofte (DK).
FLODGAARD, Hans, Jakob [DK/DK]; Melvillevej 6,
DK-2900 Hellerup (DK). NORRIS, Kjeld [DK/DK];
Broholm Allé 18, DK-2920 Charlottenlund (DK).

(74) Agent: HØIBERG A/S; St. Kongensgade 59 A, DK-1264
Copenhagen K (DK).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii)) for the following designations AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,
EG, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM,
ZW. ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA,
SD, SL, SZ, TZ, UG, ZM, ZW). Eurasian patent (AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR). OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG)

Published:

— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PRO-INFLAMMATORY AND ANTI-INFLAMMATORY ANTIBODIES AGAINST THE HEPARIN-BINDING PRO-
TEIN (HBP)

(57) Abstract: The present invention relates to providing antibodies against human heparin-binding protein (hHBP) or against a
homologue of hHBP, such as porcine heparine binding protein (pHBP) or human neutrophil elastase (hNEL), and using said anti-
bodies for the manufacture of a medicament for treatment of Gram positive and/or Gram negative infections, sepsis, disseminated
intravascular coagulation, modulation of inflammatory response, and/or prevention of cell apoptosis. Antibodies of the invention are
capable of modulating at least one inflammatory response associated with hHBP, in particular, the invention relates to monoclonal
antibody F19A5B1, capable of stimulating said at least one inflammatory response, and monoclonal antibody F19A5B4, capable of
inhibiting said at least one inflammatory response.

WO 2005/028512 A1